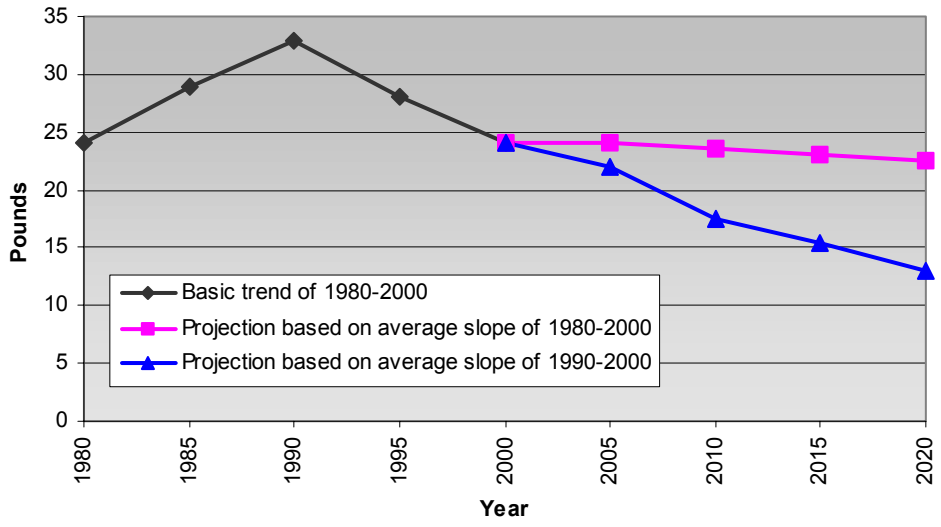
Findings on consumption of livestock products in California

California's consumption of beef and sheep products is estimated using national trends. National consumer expenditures for beef as a percentage of total food expenditures declined from over 14 percent in 1978-80 to just over seven percent in 1996. This happened in spite of a declining real price for beef over the same period (Purcell, 1998).

On a per capita basis, consumers in America are eating more chicken, turkey, and fish and less beef, pork, veal and lamb. Average annual per capita consumption of red meat declined from 127 pounds per person in 1980 to a low of 112 pounds per person in 1993. In 2000, per capita consumption of red meat reached 121 pounds per person, however, consumption of red meat including beef is still well below previous highs. Average annual per capita consumption of lamb remains at about 0.7 pounds per person, well below the previous levels of 1.1 pounds per person (U.S. International Trade Commission, 1999).

Assuming national per capita averages for beef and lamb can be applied to the eating habits of Californians, Figure 2 illustrates past and projected consumption of lamb in millions of pounds for California as a whole. Lamb consumption experienced downward trends in both the periods 1980-2000 and 1990-2000. In the 1990s, average per capita consumption began to declined . Using the 1980-2000 and 1990-2000 trends, lamb consumption is projected to continue to fall. However, if the average of 1980-2000 is used, the overall decline in consumption will be much less (Figure 2).

Figure 2. Annual lamb consumption from 1980-2000, and projected to 2020

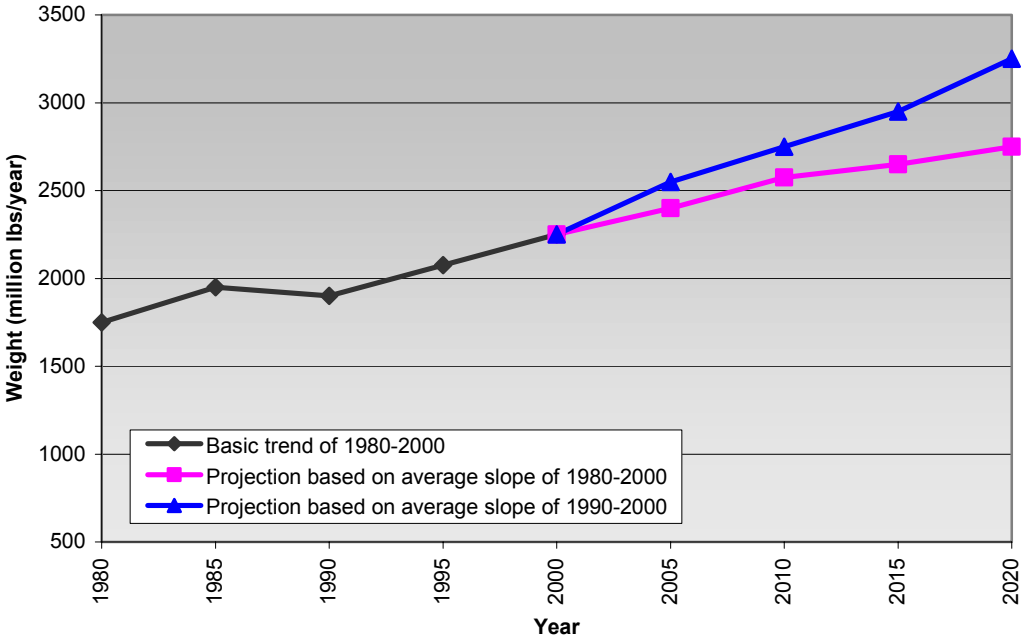


Source: U.S. International Trade Commission, 1999

Consumer preferences for lamb: Within the United States, consumer preference is towards lamb rather than mutton. Lamb has a much milder flavor than mutton. The most common outlets for marketing lamb to the public or to specialty markets are the freezer market, the retail food store market, the restaurant market, and the ethnic/religious market. Meat types purchased by these outlets include lamb, mutton, and hothouse lambs. Hothouse lambs have a live weight of 30 to 60 pounds and are processed for Easter at six to ten weeks of age (American Sheep Industry Association 2002b). Lamb consumption is heaviest on the East and West Coast because for the higher ethnic populations. Hispanics, Greeks, and Middle Easterners eat more lamb and mutton than do other ethnic groups. Native Americans also consume more lamb and mutton in their diet. Most U.S. produced mutton is exported to Mexico (U.S. International Trade Commission, 1999).

The overall trend in beef consumption since 1980 was relatively stable. For the decade of the 1990s, the trend was upward. Using these two different trends, then beef consumption for California is projected to increase consistently to 2020 (Figure 3).

Figure 3. Annual beef consumption, 1980-2000, and projected to 2020



Source: National Cattlemen's Beef Association, 2002

Consumer preferences for beef: Consumers have shown much less desire for unpackaged fresh meat and want packaged or "boxed" beef products. The national beef industry has been slow to understand this change in preference but recently has made a concerted effort to develop categories of "convenience products" that are fast to prepare and easy to serve. These include fully cooked beef roasts, steaks, and other entrees. These can be heated in the microwave and ready to serve in ten minutes. According to the U.S. Beef Association, sales of these types of products have increased dramatically. The annual sales for this category of convenience products reached nearly $115 million by April 2000. Other new products include pre-marinated beef roasts, specialty beef items for the deli category, frozen meal kits containing beef, and value-added products for the foodservice industry (National Cattlemen's Beef Association, 2001).

International scope of meat consumption and differing consumer preferences

Today, a global market has been created for beef and other meats. Changes in technology and transportation mean that foreign meats can compete against meat produced in the United States. Countries like Australia, New Zealand, and Argentina export meat at competitive prices to Europe, Japan, and even the United States. Exports of fresh, frozen, and boxed beef are common. Historically, it is also true that consumers buy more meat (including red and white meat products) as income increases (Lambert, 2001a).

The dominant form of trade is in cuts of meats and edible offal (waste parts of a butchered animal) rather than in live animals or carcasses. Consumer preferences, particularly for meat cuts, have helped define trade patterns. Where they exist, trade barriers have also had an impact on trading patterns (Economic Research Service, 2000a).

Consumers in various countries differ greatly in their preferences for kinds and quality of meat and meat products. This can include favoring of particular cuts (light versus dark meat), organ meat, and even how animals are fed (grass-fed versus hormone-altered fed).

Impact of consumer preferences on marketing strategies: Differences in preferences between meat consumers are so great that firms with multinational marketing strategies base their trade on international differences in demand (Economic Research Service, 2000a). For example, the largest meat processing firms are based in the U.S. and have production facilities in other countries as well, including Canada, Australia, Mexico, and China. These markets are linked by firms with international marketing strategies but differ in ability to produce meat and in their preferences. This means that intra-industry trade with countries importing and exporting different cuts from the same animal species is likely to expand. Intra-industry marketing may expand U.S. meat imports and exports in the future.

Over the last five years, patterns of consumption of beef worldwide have been changing. In addition to the United States and Canada, Mexico, Brazil, China, and other Asian countries have increased consumer demand for beef. In contrast, the demand for beef in Europe has fallen dramatically because of the BSE crisis (Bovine Spongiform Encephalopathy, commonly called "Mad Cow Disease"). In some European countries, retail beef sales in Winter, 2000 fell by as much as 25 to 40 percent. This is expected to continue in the near term (see U.S. beef export information).

Role of imports

Sheep and cattle

Feeder cattle are imported into the United States from Mexico and Canada. Few, if any, feeder cattle are imported directly into California. Each year since 1992, more than one million head of cattle have been imported into the U.S. from these two countries. In contrast, slaughter cattle are imported from Canada into the United States but none from Mexico (Lambert, 2001b).

Meat

Due to the complexity of commercial records, records of imports that serve just California consumers are not maintained. The complex system makes it too hard to track the final destination of shipments entering at customs ports. Thus, it is not possible to accurately track whether imports of livestock and meat stay in California. Still, with beef, it is clear that California has a large deficit. Assuming an average meat yield associated with California-produced beef, there is a substantial annual net beef deficit, which is covered by meat imported from other states and Canada.(Ekboir, 1999).

Increasing import shares: On average, the import share of U.S. food consumption (portion consumed in the United States imported from foreign countries) has been increasing during the last two decades. Beef imports for consumption have increased from 6.4 percent in 1980 to 7.7 percent in 1999. Imports of lamb for consumption increased from 9.5 percent in 1980 to 30.8 percent in 1999 (Economic Research Service, 2001).

The most dramatic increase in imports occurred with lamb. Historically, most imported lamb meat was frozen. However, over the last decade, lamb has been increasingly exported either fresh or chilled. These imports are largely semi-boneless legs of lamb and racks (loins), and this avoids the problems of marketing the remainder of the carcass.

The increase in lamb meat imports resulted in a higher market share for importers. During the last decade, Australia and New Zealand accounted for almost all U.S. imports of lamb meat. According to the U.S. International Trade Commission, prior to 1999 available pricing data shows that imports from Australia and New Zealand generally undersold the domestic industry (U.S. International Trade Commission). The U.S. is the world's largest beef importer. Beef imports tend to be industrial grade beef, most of which comes from New Zealand and Australia.

Wool

During the 1970s and 1980s, there was rapid growth in U.S. wool textile imports, mostly apparel. In 1977, the raw wool content of imported wool textiles was 117 million pounds, clean. However, by 1997, imports reached 377 million pounds, clean (Thomas, 1999). When compared to the world wool market, U.S. wool demand and supply—and the relative California shares—are small. See Economic Impact of the Elimination of the Wool Act.

Role of exports

Live sheep and cattle

U.S. exports of live sheep are relatively static. Live sheep exports, largely the cull ewes with little value in the U.S., are marketed in large numbers to Mexico (Thomas, 1999).

The North American cattle market is highly integrated. The United States supplies breeding animals to both Canada and Mexico. Canada mostly ships slaughter-ready animals (steers, heifers, and cows) to

the United States. The United States also supplies cattle for slaughter to Mexico and cull cows to Canada. Mexico in turn supplies primarily feeder cattle to the United States for finishing.

Meat

The United States exports primarily high quality beef cuts for the hotel, restaurant, and institutional markets. For 1999 and 2000, California exported between five and six percent of the quantity of beef and products produced in the State. In 2000, beef and products exports totaled over $165 million. This was approximately three percent of the total U.S. export value for beef and/or beef products and ranked ninth among California's agricultural commodity export values. This is an increase of 25 percent over similar export values of beef and products of $132 million in 1999. These levels ranked twelfth in overall export commodities but still short of 1995 values of $192 million for beef and meat products exports from California. In 2000, over three quarters of animal products exports from California went to North America or East Asia. Twenty-four percent of the exports went just to Japan (Kuminoff et al., 2001a).

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Slaughterhouses in California export about 25 percent of their output to other states; another 20 percent is sent to other countries (Ekboir, 1999).

U.S. export share of red meat: Over the last 25 years, export shares of high value U.S. products, such as red meat, have had an upward trend. An export share means that portion of a product that is exported divided by the total produced in the United States. For example, the exports share of beef has risen from 1.3 percent from 1980-89 to over five percent in 1990-1999 (Economic Research Service, 2000b). In the case of red meat, the increasing export share reflects a number of factors including declining U.S. per capita consumption of red meat; increased production; good quality product; rising income of foreign consumers; and improvements in markets brought about by trade agreements.

International trade considerations

International trade considerations have affected the livestock industry primarily in three ways: 1) lowering tariff and other monetary barriers; 2) reducing the impact of Sanitary and Phytosanitary Measures (SPS) and Technical Barriers to Trade (TBT); and 3) spread of livestock disease.

Tariffs

Meat and other agricultural products have been included in regional and global trade negotiations. The United States has conducted regional negotiations with Canada, Mexico, and Japan. The North American Free Trade Agreement (NAFTA) between the U.S., Canada, and Mexico incorporated or revised earlier trade arrangements. NAFTA eliminated or phases out tariffs and quotas between U.S. and Mexico on cattle, edible offal, fresh, chilled or frozen beef, veal, animal fats, skins, and hides (Foreign Agricultural Service, 2000). The elimination of tariffs on beef exports to Mexico, as negotiated under NAFTA, has helped to create a strong growth trend of U.S. beef exports to Mexico.

In addition, multilateral trade reforms negotiated in the Uruguay Round and the creation of the World Trade Organization (WTO) with its trade agreements have altered trade patterns. Together with NAFTA, these have led to further integration of the North American beef and cattle markets.

Lamb imports. In February 1999, after collecting information on the impacts of lamb imports, the U.S. International Trade Commission ruled that low priced imported lamb meat was causing a threat of injury to U.S. producers. In July 1999, President Clinton implemented a tariff-rate quota (TRQ) on imports of fresh, chilled, and frozen lamb meat. The TRQ applied to lamb meat imports from Australia, New Zealand, and all other countries with the exception of Canada, Mexico, Israel, and some other Caribbean and South American countries. Domestic lamb prices did increase after the TRQ (U.S. International Trade Commission, 1999). However, Australia and New Zealand challenged the tariffs under WTO rules. The WTO found in favor of Australia and New Zealand.

Non-tariff barriers

In recent years, many countries have limited or banned imports of various goods, citing concerns over food safety or animal and plant health standards. Legitimate food safety and health standards that are typically addressed and regulated include product standards and testing, labeling requirements, or bans on unacceptable imports. When these regulations are applied arbitrarily or without a sound scientific base, they can become thinly disguised trade barriers. To address such unfair product regulations, the Uruguay Round constructed agreements on Sanitary and Phytosanitary Measures (SPS) and Technical Barriers to Trade (TBT).

SPS measures permit countries to set their own standards regarding plant, animal, and human health. These standards must be based on science and cannot discriminate against individual countries. The TBT agreement guards against regulations, standards, testing, and labeling requirements to ensure they do not create artificial barriers to trade. The World Trade Organization (WTO) reached an Agreement on the Application of Sanitary and Phytosanitary measures and implemented it in January 1995.

Europe and the ban of American beef: An example of the application of Sanitary and Phytosanitary measures by countries to limit trade is the hormone ban imposed by the European Union (EU) in December of 1985. The EU action banned the use of synthetic hormones and prohibited imports of animals and meat from animals to which hormones had been administered. In effect, this prohibited importation of most U.S. beef. The U.S. objected and stated that the policy of the hormone ban is not based on scientific evidence, a risk assessment, or relevant international SPS standards. The U.S. and Canada protested the ban formally under the World Trade Organization SPS Agreement in 1997. In 1999, after a series of actions over several years, WTO arbitrators ruled that the European Union's ban on U.S. beef and beef products was unjustified and had resulted in lost annual U.S. exports of beef to the EU in the amount of $117 million. Under WTO rules, the United States has imposed 100 percent tariffs on a list of EU products with an annual trade value of $117 million. These include a wide-ranging list of products from different EU countries (U.S. Trade Representative, 1999).

SPS and TBT agreements are especially important to California agriculture and livestock because California has many specialized agricultural export products. While much progress has been made in reducing trade barriers, some countries that are major export areas for California products still protect their domestic agricultural sectors. For example, the European Union offers export subsidies on beef, cheese and other dairy products, and processed fruit in competition with California (U.S. Trade Representative, 1999).

Spread of livestock disease

American agricultural policy has long recognized the threat to domestic farming and ranching from diseases introduced from other countries. The U.S. has developed a system—the National Animal Health Emergency Management System (NAHEMS)—to respond to animal diseases as they are detected. Each state plays a large role in livestock and wildlife surveillance and receives support from the U.S. Department of Agriculture. In October 2001, for example, California received a grant along with 31 other states to bolster its emergency animal disease prevention, preparedness, response, and recovery systems. See Veneman Announces $1.8 Million in State Grants For Emergency Animal Disease Preparedness Activities.

California's livestock industry has undergone a variety of changes making it more susceptible to the spread of diseases such as foot-and-mouth disease. These changes include factors such as greater concentrations of cattle in feedlots and nearby areas and use of dairy related byproducts as cattle feed (Ekboir, 1999).